

UNITED STATES PATENT OFFICE.

WILLIAM E. GARDNER, OF PITTSBURG, PENNSYLVANIA

RESISTANCE COMPOUND.

991,841.

Specification of Letters Patent.

Patented May 9, 1911.

No Drawing.

Application filed October 6, 1910. Serial No. 585,595.

To all whom it may concern:

Be it known that I, WILLIAM E. GARDNER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Resistance Compounds; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object, to provide a compound which shall offer a resistance to the passage of an electric current there-through, as well as be practically indestructible by the heating effect of the current.

The compound consists of the following ingredients: lamp black, bone ash, and flour of mica. The lamp black, commonly termed soot, is of itself a good conductor of electric current, while bone ash is considered as practically a non-conductor, and flour of mica as an absolute non-conductor.

When thoroughly mixed, the conductivity of the compound, or the resistance offered thereby to the passage of an electric current, will depend upon the proportion of one element to the other, or others, which proportions will depend upon the circumstance under which it is employed.

For most purposes, the lamp black and bone ash are to be preferred, without the addition of the flour of mica, or the flour of mica substituted for the bone ash.

All of the ingredients of the compound being practically infusible will permit of its being raised to a very high degree of temperature, by an electric current, particularly where it be desired to employ the same for heating purposes, when properly proportioned.

I claim:

1. The herein described compound, containing lamp black, and bone ash, for the purpose set forth.

2. The herein described compound, containing lamp black, and flour of mica, for the purpose set forth.

3. The herein described compound, consisting of lamp black, bone ash, and flour of mica, for the purpose set forth.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM E. GARDNER.

Witnesses:

D. B. OAKS,
R. S. HARRISON.